

Notice of Allowability

Application No.

09/638,164

Examiner

Zachary A. Davis

Applicant(s)

FURUKAWA ET AL.

Art Unit

2137

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to the amendment received 15 December 2005.
2. ☒ The allowed claim(s) is/are 1-4, 6, 9, 10, 13-15, 17, 35, 37-39, 42-45, 48, 49 and 52.
3. ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) ☒ All b) ☐ Some* c) ☐ None of the:
 1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

* Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.
THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
 5. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
 - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
 - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
 - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

1. ☒ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3. ☐ Information Disclosure Statements (PTO-1449 or PTO/SB/08), Paper No./Mail Date _____
4. ☐ Examiner's Comment Regarding Requirement for Deposit of Biological Material
5. ☐ Notice of Informal Patent Application (PTO-152)
6. ☐ Interview Summary (PTO-413), Paper No./Mail Date _____
7. ☒ Examiner's Amendment/Comment
8. ☒ Examiner's Statement of Reasons for Allowance
9. ☐ Other _____

EXAMINER'S AMENDMENT

1. An amendment was received on 15 December 2005. Claim 1 has been amended. No claims have been added or canceled. Claims 49 and 52 were allowed in the Office action of 26 April 2005. Claims 10, 13-15, 17, 35, 37-39, 42-45, and 48 were allowed in the Office action of 09 November 2005.

Specification

2. Please **CHANGE THE TITLE** to:

Copyright Control of Encrypted Data Using Uncorrected Errors in an Error
Correcting Code

Allowable Subject Matter

3. Claims 1-4, 6, and 9 are allowed.

4. The following is an examiner's statement of reasons for allowance:

Independent Claim 1 is directed to a data storing medium that includes a plurality of areas, which are embossed to be write prohibited and which are spaced apart by a predetermined interval, storing copyright control information necessary for decrypting encrypted data. Claim 1 further recites that the copyright control information is converted such that the data is not corrected by an error correcting code when

encrypted data is reproduced, where the conversion "satisfies a relation of $2a + b > d$ where 'a' is a number of lines that are not erased as an error of the copyright control information, 'b' is a number of lines that are erased thereof, and 'd' is a minimum distance of the error correction code". The closest prior art, Tosaki et al, US Patent 6590846, also discloses a data storing medium including, *inter alia*, a plurality of copyright control information areas which are spaced apart by a predetermined interval and which are embossed to be write-protected; however, neither Tosaki nor Matsumoto et al, US Patent 6320829, alone or in combination, teach or suggest the limitation of converting copyright control information so that data is not corrected by an error correcting code when encrypted data is reproduced, where the conversion "satisfies a relation of $2a + b > d$ where 'a' is a number of lines that are not erased as an error of the copyright control information, 'b' is a number of lines that are erased thereof, and 'd' is a minimum distance of the error correction code".

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Conclusion

5. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

- a. Brody et al, US Patent 6718501, discloses a copy protection method for an audio compact disc that includes overwriting data within error correction codewords with erroneous symbols, either erasures or arbitrary errors. See particularly column 3, line 63-column 4, line 38, and column 16, line 64-column 19, line 10. Note that this reference does not constitute prior art to the present application, but has been included for the sake of completeness.
- b. WIPO Publications WO01/15028 and WO01/41130 are related to the above US Patent to Brody et al.
- c. Bloom et al, "Copy Protection for DVD Video", discusses several proposals for copy protection of digital data on optical discs, specifically DVDs.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Zachary A. Davis whose telephone number is (571) 272-3870. The examiner can normally be reached on weekdays 8:30-6:00, alternate Fridays off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Emmanuel Moise can be reached on (571) 272-3865. The fax phone

number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

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Matthew P. Smithers
MATTHEW SMITHERS
PRIMARY EXAMINER
Art Unit 2137